NPDES PERMIT FACT SHEET

PESTICIDE GENERAL PERMIT FOR POINT SOURCE DISCHARGES TO WATERS OF THE STATE FROM THE APPLICATION OF PESTICIDES

Permit Number ING870000 (2011–2016) MARCH 3, 2011 (Updated Oct. 2011)

GENERAL FACILITY INFORMATION

IDEM proposes to issue a new NPDES general permit that covers discharges to waters of the state of Indiana resulting from the application of pesticides as described below.

Description of activities covered under this permit

Pesticide discharges from the following applications of pesticides are covered under this general permit:

- (1) The application of pesticides directly to water in order to control pests. Examples of such applications include applications to control mosquito larvae, aquatic weeds, or other pests that are present in water.
- (2) The application of pesticides to control pests that are present over water, including near the water, where a portion of the pesticides will unavoidably be deposited to the water in order to target the pests effectively. Examples of such applications include when insecticides are aerially applied to a forest canopy where water may be present below the canopy, or when pesticides are applied over or near water for control of adult mosquitoes or other pests.

Specific pesticide uses that are covered under this general permit include:

- (1) Control of public health or nuisance pests and other flying insect pests that develop or are present during a portion of their life cycle in or above standing or flowing water. Public health or nuisance pests in this use category include but not limited to mosquitoes and black flies.
- (2) Control of invasive or other nuisance weeds and algae in water and at water's edge, including irrigation ditches and irrigation canals including but not limited to:
 - Treating weeds in a right-of-way or easement where to target the pests effectively a portion of the pesticide unavoidably will be applied over and deposited to water; and
 - Control of aquatic vegetation through chemical or biological means in waters
 of the state under a permit issued by the Department of Natural Resources
 under IC 14-22-9-10 and 312 IAC 9-10-3.
- (3) Control of invasive or other nuisance animals in water and at the water's edge. Aquatic nuisance animals in this use category include, but are not limited to fish, lampreys, and mollusks.
- (4) Aerial or ground application of a pesticide over a forest canopy to control the population of a pest species, for example, an insect or pathogen, where to target the pests effectively a portion of the pesticide unavoidably will be applied over and deposited to water.
- (5) Application of pesticides to outstanding state resource waters designated in 327 IAC 2-1-2, 327 IAC 2-1-11, or 327 IAC 2-1.5-19 to restore or maintain water quality or to protect public health or the environment where those discharges

either do not degrade water quality or only degrade water quality on a short-term or temporary basis.

Description of activities that are not covered under this permit

Pesticide uses that are not covered under this general permit include:

- (1) Agricultural pesticide applications to the land or to terrestrial crops.
- (2) Agricultural stormwater runoff.
- (3) Pesticide applications or discharges that violate <u>IC 15-16-4</u>, <u>IC 15-16-5</u>, the rules of the Office of the Indiana State Chemist (OISC) at <u>355 IAC 4</u> or <u>355 IAC 5</u>, the rules of the Indiana Pesticide Review Board (IPRB) at <u>357 IAC 1</u>, or the pesticide product label.
- (4) Pesticide applications that result in the discharge of any pesticide to waters that have been designated as impaired for that pesticide or its degradates or as outstanding state resource waters designated in 327 IAC 2-1-2, 327 IAC 2-1-11, or 327 IAC 2-1.5-19 except as otherwise provided, that violates a water quality standard established in 327 IAC 2, or within a pesticide setback established by the OISC or the IPRB or described in the product label.
- (5) Discharges that are currently covered by another NPDES permit.
- (6) Discharges included in a permit that within the last five (5) years has been or is in the process of being denied, terminated, or revoked by the department.

Detailed description of the discharge location

Pesticide discharge locations exist throughout Indiana and include the following:

- (1) Aquatic weed and vegetation control. Indiana has numerous water bodies and waterways that frequently require pesticide use to control nuisance or invasive vegetation to maintain water and habitat quality, navigation, resource use, etc. These areas exist throughout Indiana.
- (2) <u>Aquatic invasive species</u>. Indiana Department of Natural Resources, the U.S. Fish & Wildlife Service and others control a variety of aquatic invasive species. The range and extent of these activities are documented in the "<u>Indiana Aquatic Nuisance Species (ANS) Management Plan.</u>"
- (3) <u>Mosquito control activities</u>. Mosquito control is carried out at locations throughout Indiana.
- (4) <u>Gypsy moth and other nuisance insect control in forests</u>. Gypsy moth control activities are currently being conducted in northern Indiana under <u>Indiana's</u> Strategic Plan for Gypsy Moth Management.
- (5) <u>Blue-green algae</u>. Treatment of surface drinking water supplies for blue-green algae blooms by utilities or reservoir managers and the Department of Natural Resources.

Type and quantity of wastes or pollutants discharged

Pollutants covered under this permit are pesticides used for control of nuisance pests in or over the water in quantities authorized by the OISC. Pesticides applied include those approved by and registered with the OISC under IC 15-16-4-61 for control of aquatic and terrestrial pests. A person covered by this general permit may only utilize pesticides which are currently registered with the OISC for aquatic use in Indiana, and during the course of this permit the list of registered pesticides may change. The

quantities of these pesticides used for aquatic application has not been specifically analyzed. In addition, it is not known how much of each pesticide becomes waste after it is applied. Using current monitoring and data measurement techniques, it is not possible to meaningfully quantify the amount discharged as a pollutant at this time.

SUMMARY RATIONALE OF PERMIT CONDITIONS

Division of authority under Indiana law

Under current Indiana law, the Indiana Department of Environmental Management (IDEM) is responsible for implementation of the Clean Water Act, and the OISC is charged with regulation of pesticide use. [IC 13-13-5-1(1), IC 15-16-4] As a result of this divided jurisdiction, the permit contains those conditions that are relevant to the Clean Water Act (CWA), and does not intrude on the statutory jurisdiction of the OISC.

Indiana pesticide rules equivalent to federal standards

The OISC has determined that Indiana law and the rules of the Indiana Pesticide Review Board and the OISC are equivalent to and as protective as the standards of the Environmental Protection Agency's final pesticide general permit (EPA PGP) pertaining to application of pesticides.

Definitions

The definitions in the following apply throughout this document:

- IC 13-11-2
- IC 15-16-4
- IC 15-16-5
- 327 IAC 2-1-9
- 327 IAC 2-1.5-2
- 327 IAC 2-6.1-4
- 327 IAC 5-1.5
- 355 IAC 4-0.5
- 357 IAC 1
- 7 U.S.C. 136
- 33 U.S.C.1321
- 40 CFR 122
- 40 CFR 130.2
- 40 CFR 152.3
- 40 CFR 166.3
- 40 CFR 174.3
- The U.S. Environmental Protection Agency "NPDES Pesticide General Permit (PGP) for Point Source Discharges to Waters of the United States from the Application of Pesticides (Final)" issued in October 2011.

The term "Person" has the meaning set forth in IC 13-11-2-158:

(a) "Person", for purposes of:

(1) IC 13-21;

- (2) air pollution control laws;
- (3) water pollution control laws; and
- (4) environmental management laws, except as provided in subsections (c), (d),
- (e), and (h);

means an individual, a partnership, a copartnership, a firm, a company, a corporation, an association, a joint stock company, a trust, an estate, a municipal corporation, a city, a school city, a town, a school town, a school district, a school corporation, a county, any consolidated unit of government, political subdivision, state agency, a contractor, or any other legal entity.

Notices of intent

This permit will require the largest pesticide applicators to submit a notice of intent, unless they are exempted by one of the provisions in Table 4 of the permit. Some of the exemptions include a person who is certified or licensed to apply pesticides by the Office of the Indiana State Chemist (OISC) or a person have been issued a GN number by the OISC in any of the following categories: 2 – Forest Pest Management; 3B – Turf Management; 5 – Aquatic Pest Management; 6 – Industrial Weed Management; 7A - Industrial, Institutional, Structural, and Health-Related Pest Management; 8 – Mosquito Management; and 11 – Aerial Application. A "GN number" is the OISC identifier number that is assigned to a "government or not-for-hire pesticide application operating location". There are also exemptions for pesticide research and development activities and for a person who applies pesticides under a permit issued by the Indiana Department of Natural Resources under IC 14-22-9-10 and 312 IAC 9-10-3.

These operators would potentially include the following if they exceed a use pattern threshold or have a discharge to an outstanding state resource water:

- (1) The Indiana Department of Natural Resources (IDNR) which conducts aquatic pesticide applications with its employees, contracts for pesticide application by registered applicators, and permits application of aquatic pesticides to Indiana water bodies and waterways under Indiana law. IDNR also contracts for and supervises aerial pesticide application to control gypsy moth and other invasive species.
- (2) The Indiana Department of Transportation that uses its employees and contractors to apply pesticides to ditches and ditch banks to maintain public rightof-ways.
- (3) The U.S. Forest Service when it performs or contracts for pesticide application to control pests in national forests.
- (4) Utilities, railroads and other entities that apply pesticides to right-of-ways to control invasive or nuisance vegetation if they (A) exceed a use pattern threshold and (B) are not a small business as defined in Indiana law (IC 5-28-2-6).

Under 40 CFR 122.28(b)(2)(v), the commissioner has determined that submission of a notice of intent under this permit by pesticide applicators other than the pesticide applicators described above is unnecessary, but is not prohibited. Most pesticide applications that would exceed a threshold in the permit are (1) conducted by the state

of Indiana or a federal agency using its employees or contractors or by large companies such as utilities and railroads, (2) are permitted by the state, or (3) are carried out by persons registered or certified by the OISC. All of these pesticide applications are a matter of public record. All pesticide application in the State of Indiana is regulated by the OISC. As a result of this determination, submission of a notice of intent by every pesticide applicator will not be required under this general permit. Notice of intents are only required of those persons who meet the criteria of Tables 1, 2 & 3 and who are not exempted from NOI submittal by Table 4.

Pesticide Discharge Management Plans

This permit will require only those persons who are required to submit a Notice of Intent to also develop a Pesticide Discharge Management Plan (PDMP). The form of the plan will be specified by the OISC since the PDMP consists of standards and procedures applicable to the planning and control of pesticide application and the OISC is the agency tasked by Indiana law with controlling the application of pesticides in Indiana. The Plan is not required to be submitted to IDEM or OISC for approval prior to its implementation. A copy of the PDMP shall be maintained by the person and shall be made available for agency (IDEM or OISC) review upon request.

Declared Pest Emergencies

Persons applying pesticides in response to a declared pest emergency situation under 40 CFR 166 will be authorized to discharge immediately for activities conducted in response to that declared pest emergency situation.

DETAILED RATIONALE OF PERMIT CONDITIONS

Permit conditions

Permittees will be required to comply with the following to maintain coverage under this permit. The permit contains all provisions of the EPA PGP relating to CWA implementation, including notification of spills, leaks and other unpermitted discharges and adverse incident notification, termination, revocation, requirement to obtain an individual NPDES permit, and provisions for changes to the terms and conditions of the general permit.

Technology-based effluent limitations

Permit conditions to comply with technology-based effluent limitations:

- (1) <u>IC 15-16-4</u> covers pesticide approvals, registration of pesticides, handling, storage and disposal of pesticides.
- (2) <u>IC 15-16-5</u> covers pesticide use and application, licensing, certification and registration of pesticide applicators, enforcement and violations.
- (3) 355 IAC 4 covers pesticide applicator certification and registration, supervision of applicators, site awareness and on-site supervision, liability coverage, recordkeeping.
- (4) 355 IAC 5 covers storage and secondary containment of pesticides.
- (5) <u>357 IAC 1</u> covers violations and enforcement, use of pesticides in wellhead protection areas and near community public water supply system wells,

- community-wide mosquito abatement, pesticide drift, open burning of pesticide containers, use of pesticide service containers, use of pesticides at golf courses.
- (6) The pesticide product label required by Section 3 of the Federal Insecticide, Fungicide and Rodenticide Act (7 U.S.C. §136a).

Water quality based effluent limitations

Permit conditions to comply with applicable numeric and narrative state water quality standards and water quality based effluent limitations:

- (1) <u>IC 14-22-9-10</u> and <u>312 IAC 9-10-3</u> cover aquatic pesticide applications under a permit issued by the Indiana Department of Natural Resources for control of aquatic vegetation.
- (2) 327 IAC 5-2-8 covers general standards and requirements for NPDES permits.
- (3) 327 IAC 2 covers numeric and narrative water quality standards in Indiana.

Monitoring and reporting requirements

This permit requires permittees to report spills under existing Indiana rules at 327 IAC 2-6.1. This permit also requires permittees to reports spills in accordance with Section 311 of the Clean Water Act (33 U.S.C. 1321). Since those spill reporting provisions are matters of longstanding law and rule, they are not further restated in this permit. This permit also requires permittees to monitor for, identify and report adverse incidents. The language for this requirement was drawn from the proposed EPA PGP. Permit conditions to comply with state and federal reporting requirements are:

- (1) 327 IAC 2-6.1 for reporting of spills.
- (2) 40 CFR 110.6 and 40 CFR 117.21 for reporting of spills to the National Response Center.
- (3) IC 13-14-2-2 and 327 IAC 5-1-3(c) for inspection and entry.
- (4) Section 311(b)(5) of the Federal Water Pollution Control Act (33 U.S.C. 1321(b)(5)).

Record-keeping

Record-keeping requirements are found at <u>IC 15-16-5-59</u> and <u>355 IAC 4-4</u>. The Indiana State Chemist Office requires record-keeping for applicators of Restricted Use Products. Records are required for applications to schools, golf courses, and any termiticide applications.

1. Public health, nuisance & flying insect pests, life cycle – water

OISC has been in touch with the largest organized mosquito control programs in the state. They track and record their own pesticide use information (for both restricted use and general use pesticides), summarize it, and then include it as part of their annual report that they prepare for purposes other than NPDES permit compliance. They routinely supply OISC with copies of their annual report as an FYI. Smaller mosquito control programs keep pesticide use records for their own liability purposes. Keeping track of annual pesticide use for a smaller program is obviously much easier than it would be for a large program. Their pesticide use choices are usually more limited and

the water bodies (and watersheds) near which they operate are much easier to identify. In addition, OISC has never conducted a mosquito pesticide application investigation for which the applicator (county, city or town) has not been able to provide use information to us. Bottom line, they all keep use records whether required or not.

2. Invasive or nuisance weeds, algae in water, water's edge - IDNR permits require record keeping of all pesticide products applied to water to control aquatic weeds,

Under FIFRA U.S. EPA performs a risk assessment when making a registration decision about the approved use of a pesticide. They also factor in whether a pesticide can be used without unreasonable adverse effects when determining whether certain uses should be classified as Restricted Use Pesticides. Unreasonable adverse effects to water are definitely one of the criteria used in determining RUP classification. For example, if a product like atrazine is a threat to water, then it gets classified as an RUP. As a result of EPA's diligence during the pesticide registration and re-registration processes, a requirement to keep application records is created with the RUP classification. In spite of this automatic record keeping requirement for pesticides that may be problematic when used around water, most aquatic pesticide applications are made by certified and licensed individuals who keep records for all pesticide applications. OISC has not conducted a pesticide use/misuse investigation for aquatic applications within the last 15 years for which the applicator has not been able to provide application records. They keep the records for personal liability purposes.

3. Invasive or nuisance animals in water, waters edge DNR & FWS control of invasive animals

OISC has contacted IDNR-FWS to ensure that all of their applications for nuisance/invasive animals are performed by certified and licensed IDNR staff or certified and licensed contractors. The IDNR will do a risk assessment before determining to apply the pesticide. Many of the pesticides they use are Restricted Use Pesticides so records are mandated. Even for the general use pesticides the risk assessment will then dictate the pesticide choice, rates, locations, and timing. As a result, IDNR-FWS keeps a record of everything that they apply or that is applied by their contractor.

4. Forest canopy - OISC contacted the IDNR State Entomologist and determined that currently the only type of forest canopy pesticide application work being done in Indiana is Gypsy Moth control and occasionally some Forest Tent Caterpillar control work. These applications are made by air. Regardless of the pest, the work is contracted by IDNR to certified and licensed applicators (businesses). IDNR dictates in those contracts the specific pesticide to be used, the application rate, the application timing and the application location. IDNR also keeps as part of their application records the actual geo-located applicator flight patterns including spray nozzle on and off records. These records are then a matter of public record.

Special requirements

This permit requires compliance with the Endangered Species Act and Indiana law concerning non-game endangered and threatened species at:

- (1) The Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.).
- (2) IC 14-22-34 for non-game endangered and threatened species.

This permit also makes special provisions for use of pesticides in declared pest emergency conditions under 40 CF 166.

Requirements for document signatures are found in <u>327 IAC 5-2-22</u>.

ADMINISTRATIVE REQUIREMENTS

Procedures for reaching a final decision on the general permit

This permit is based on the proposed EPA PGP that was available at the time the permit was drafted. The final EPA PGP was not available. As a delegated state, Indiana is required to develop a permit that is not less stringent than permits issued under the federal NPDES program. Conversely, IDEM is strongly discouraged from developing permit conditions that are substantively more stringent than the federal program. We have attempted to strike this delicate balance in this permit even though the final EPA PGP was not available for comparison when this draft general permit was public noticed.

As provided in 40 CFR 124.10, this general permit was noticed for public comment on March 5, 2011. At the end of the 30 day comment period, the permit will be issued as a final administrative general permit, with any modifications requested by EPA Region 5 or resulting from public comments received during the public comment period.

Public comment period beginning and ending dates

As provided in 40 CFR 124.10, this general permit was noticed for public comment on March 5, 2011. Public comment was accepted until close of business on April 4, 2011.

Procedures for requesting a hearing

In addition to the requirements of 40 CFR 124.12, procedures for requesting a hearing are found in <u>327 IAC 5-3</u>. There were no requests for a public hearing as a result of the March 5, 2011 public notice of this draft general permit.

Other procedures for public participation

IDEM complies with the public participation requirements of 40 CFR 122 and 40 CFR 124. Other procedures for public participation are found in 327 IAC 5-3.

CONTACT FOR MORE INFORMATION

Please direct comments and questions about this fact sheet or the general permit to Catherine Hess at 317-232-8704 or chess@idem.in.gov.

Post Public Notice Addendum October 25, 2011

The draft Indiana Pesticide General Permit (PGP) was public noticed on March 5, 2011 for a 30-day comment period. During the comment period IDEM received eight (8) comment letters regarding the draft PGP. All comments and IDEM's responses to those comments can be found in a separate Response to Comments document. The following listing is an itemization of the actual changes which were made to the Indiana Pesticide General Permit since the close of the public notice comment period. These changes occurred both as a result of the comments received and as a result of staff recommendations.

- 1. A cover page was added to the front of the Pesticide General Permit which clearly outlines the issuance date, effective date and expiration date of the general permit, adds a signature block, and adds language from the administrative extension of the general permit in the event that the permit is not renewed prior to its expiration date. These changes were based upon comments received during the public notice comment period.
- 2. The effective date of the permit was changed from April 9, 2011 to October 31, 2011 based on the court-approved extension for issuing the PGP. The expiration date was changed from April 8, 2016 to October 30, 2016 for the same reason. The permit gives authorization to discharge on the effective date of the permit.
- 3. Numeric formatting was added to the permit for easier referencing.
- 4. The word "draft" was deleted from the heading of the permit, since this is no longer a draft permit document.
- 5. The permit number was changed from ING870001 to ING870000 in keeping with the typical numbering for administrative general permits in EPA's tracking system. The number ending in "0000" represents the "Master General Permit" and then the subsequent facilities who file NOIs are assigned tracking numbers beginning with ING870001.
- 6. References to "you" and "your" were removed from the general permit and replaced with references to a "person". The definition of the term "person" was added to the fact sheet.
- 7. Section 1.4 of the permit was amended to remove the reference to the definitions in 327 IAC 15-1-2, because these terms are defined in the other regulatory citations. Also the reference to the draft EPA Pesticide General Permit was changed to reference the final EPA Pesticide General Permit that will be issued by the time the Indiana Pesticide General Permit is issued.
- 8. Clarifying language was added to Section 2.1 of the permit to show that regardless of the size of the annual treatment area, pesticide use categories described in Table 1 are authorized activities under this permit.

- 9. Language was added to the heading for Column 2 of Table 1 to clarify that the listed thresholds are for determining who needs to submit NOIs (cross-referenced from Table 3). Language was also added to Section 1.1 to clarify that if a person applies pesticides in a use pattern described in Column 1 of Table 1 that person's pesticide discharges are automatically covered under this general permit as long as the person complies with all requirements of this permit.
- 10. Language was added to Column 2 of Table 1 to clarify that for OSRWs there is no minimum threshold for determining who needs to submit an NOI.
- 11. Language was added to Section 3.3 (Adverse Incident Notifications) to clarify that "all persons covered by this general permit must monitor for, identify, and report adverse incidents." This change was requested by U.S. EPA Region 5 as a part of their non-objection letter pertaining to their review of the draft Pesticide General Permit. Also the draft permit contained contradictory requirements to notify IDEM "immediately" and "within 24 hours" when certain adverse incidents occurred. After a more thorough review of the Indiana rules and statutes, this subsection has been amended to clarify the reporting timeframes for the various types of adverse incident notifications.
- 12. The NOI submittal dates in Column 2 of Table 3 were changed from November 7, 2011 until November 1, 2012. For discharges beginning after November 1, 2012, the NOI is to be submitted at least 10 days prior to commencement of pesticide application(s). This additional 360 days will allow IDEM and OISC staff sufficient time to conduct public outreach and develop needed implementation measures.
- 13. Table 4 was amended to provide 2 additional exemptions for those potentially required to submit a notice of intent. These include persons who have been issued a GN number (government or not-for-profit number) by OISC in one of several specific categories. The other exemption was for those certified or registered in Category 7A, as requested by a representative of the Indiana Pest Management Association.
- 14. Clarifying language was added to Sections 5.1 and 5.2 of the general permit to clarify who is required to submit a notice of intent (NOI) and that those required to submit a notice of intent are also required to develop and retain a Pesticide Discharge Management Plan (PDMP). Additional clarifying language was also added to the fact sheet as it pertains to NOI submittals and PDMP development.
- 15. Section 5.2 (Pesticide Discharge Management Plan) was amended to change the date by which a PDMP must be developed from 11/7/2011 to 11/1/2012 (or a later date for new discharges which commence after 11/1/2012.
- 16. Section 5.2 (Pesticide Discharge Management Plan) was also amended to clarify that a PDMP is not required to be submitted to IDEM or OISC, unless specifically requested.

- 17. References to 327 IAC 15-4 for NPDES General Permits (standard conditions) were changed to reference 327 IAC 5-2-8 which pertains to standard conditions for all NPDES permits. This occurred because of pending rule changes to 327 IAC 15.
- 18. References to 327 IAC 15-4-3(g) which pertains to signature requirements were changed to reference 327 IAC 5-2-22. This occurred because of pending rule changes to the 327 IAC 15.

The following changes were made to the Permit Fact Sheet:

- 19. The list of pesticides under "Type and quantity of wastes or pollutants discharged" was removed due to the fact that it is an incomplete listing. Instead it was replaced with a cross-reference to IC 15-16-4-61, at the suggestion of the Office of Indiana State Chemist.
- 20. Additional language regarding Recordkeeping Requirements was added to the fact sheet to describe the recordkeeping requirements of the Office of Indiana State Chemist per rule and statute. This information was provided to demonstrate some of the existing OISC regulatory oversight and documentation thereof
- 21. The draft permit fact sheet contained some erroneous dates as to the public notice comment period which was provided for the draft Indiana Pesticide General Permit. These dates and related information have been corrected.